Permit Fact Sheet

General Information

| WI-0020711-09-0 | | | |
|--|--|--|--|
| Cedar Grove Village | | | |
| P O Box 426, Cedar Gro | ove, WI | | |
| Cedar Grove WI 53013- | 0426 | | |
| North bank of Barr Cree 43.5779° N, Long: 87.80 | k, approximately 100 yards south effluent sampling location. (Lat: 077° W) | | |
| Barr Creek (Black River | Watershed, Sheboygan River Basin) in Sheboygan County | | |
| 0.07 cfs | | | |
| Limited Aquatic Life; non-public water supply | | | |
| Daily Maximum | 1.0 MGD | | |
| Weekly Maximum | 0.94 MGD | | |
| Monthly Maximum | 0.6 MGD | | |
| Annual Average | 0.4 MGD | | |
| No. | | | |
| Yes. Plant is rated as a Basic facility with subclasses A1, B, C, L, and SS. | | | |
| N/A | | | |
| | Cedar Grove Village P O Box 426, Cedar Grove Cedar Grove WI 53013-North bank of Barr Cree 43.5779° N, Long: 87.80 Barr Creek (Black River 0.07 cfs Limited Aquatic Life; no Daily Maximum Weekly Maximum Monthly Maximum Annual Average No. Yes. Plant is rated as a light of the state of the stat | | |

Facility Description

The Village of Cedar Grove operates a 0.4 MGD Sequential Batch Reactor wastewater treatment plant. The plant serves approximately 2,100 people with no significant industrial contribution. Raw wastewater is gravity fed to a headworks facility where larger solids are removed by cylindrical fine screen and grit is removed by an aerated grit chamber. Wastewater then flows through a 6-inch Parshall flume and ultrasonic flow meter, where it is pumped to a wet well and enters a splitter box between two basins. Wastewater is treated in sequential batch reactors by aerating and settling before being decanted and sent through tertiary filters of anthracite media. The plant has the ability to disinfect using UV if needed. Effluent travels down a gravity reparation cascade before discharge to the north bank of Barr Creek. Waste sludge is pumped from the batch reactor basins to an aerated digestion tank and to storage before being land applied on Department approved agricultural fields.

The Department has found the facility to be in substantial compliance with the current permit.

| | Sample Point Designation | | | | | |
|---------------------------|--|---|--|--|--|--|
| Sample Point Number | Discharge Flow, Units, and Averaging Period | Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable) | | | | |

| | Sample Point Designation | | | | | |
|---------------------------|--|--|--|--|--|--|
| Sample Point Number | Discharge Flow, Units, and Averaging Period | Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable) | | | | |
| 701 | Flow: 0.26 MGD; TSS: 214.25 mg/L; BOD ₅ 186.58 mg/L; January 2014-May 2019 averages. | INFLUENT: 24-hour composite samples shall be collected from the lift station. | | | | |
| 001 | Flow: 0.19 MGD; TSS: 3.05 mg/L; BOD ₅ 5.94 mg/L; January 2014- May 2019 averages. | EFFLUENT: 24-hour composite samples shall be collected from the sampling building at the top of the cascade. Grab samples shall be collected from the bottom of the cascade. | | | | |
| 005 | 22 U.S. Dry tons. (2018) | Class B, aerobically digested liquid sludge. Representative composite samples shall be collected from the sludge storage tank prior to land application. | | | | |

1 Influent - Proposed Monitoring

1.1 Sample Point Number: 701- INFLUENT TO PLANT

| Monitoring Requirements and Limitations | | | | | | | |
|---|------------|--------------------|---------------------|----------------|-------|--|--|
| Parameter | Limit Type | Limit and Units | Sample Frequency | Sample Type | Notes | | |
| Flow Rate | | MGD | Continuous | Continuous | | | |
| BOD ₅ , Total | | mg/L | Monthly | 24-Hr Comp | | | |
| CBOD ₅ | | mg/L | 2/Week | 24-Hr Comp | | | |
| Suspended Solids, Total | | mg/L | 2/Week | 24-Hr Comp | | | |

1.1.1 Changes from Previous Permit:

CBOD₅: Bi-weekly influent monitoring for CBOD5 was added to the proposed permit

Total Phosphorus: Monthly influent monitoring for Total Phosphorus was removed from the proposed permit.

1.1.2 Explanation of Limits and Monitoring Requirements

CBOD₅ and Total Suspended Solids: Tracking of CBOD₅ and total suspended solids are required for percent removal requirements found in s. NF 210.05, Wis. Adm. Code and in the Standard Requirements section of the permit.

Total BOD₅: Monitoring is included to satisfy operation requirements for the CMAR.

Total Phosphorus: Monitoring requirements for total phosphorus were initially included in reissued permits to provide better characterization of influent wastewater. Review of phosphorus data submitted from 2014 to 2019 show fairly consistent trends in influent loading. Therefore, monitoring of influent phosphorus as an operational parameter is removed from the proposed permit. The permittee may elect to continue monitoring influent total phosphorus as an operational parameter, but it is no longer required as a condition of the permit.

2 Surface Water - Proposed Monitoring and Limitations

2.1 Sample Point Number: 001- EFFLUENT

| | Mo | nitoring Requi | rements and Lir | nitations | |
|-------------------------------------|-------------------------|--------------------|---------------------|----------------|--|
| Parameter | Limit Type | Limit and Units | Sample Frequency | Sample Type | Notes |
| Flow Rate | | MGD | Continuous | Continuous | |
| CBOD ₅ | Weekly Avg | 25 mg/L | 2/Week | 24-Hr Comp | |
| CBOD ₅ | Monthly Avg | 16 mg/L | 2/Week | 24-Hr Comp | |
| Suspended Solids, Total | Weekly Avg | 30 mg/L | 2/Week | 24-Hr Comp | |
| Suspended Solids, Total | Monthly Avg | 20 mg/L | 2/Week | 24-Hr Comp | |
| Suspended Solids, Total | | lbs/day | Monthly | Calculated | TSS mass = daily concentration (mg/L) x daily flow (MGD) x 8.34 |
| pH Field | Daily Min | 6.0 su | 5/Week | Grab | |
| pH Field | Daily Max | 9.0 su | 5/Week | Grab | |
| Dissolved Oxygen | Daily Min | 4.0 mg/L | 5/Week | Grab | |
| Nitrogen, Ammonia Variable Limit | | mg/L | Weekly | 24-Hr Comp | Limits become effective on January 1, 2022. See Daily Maximum Ammonia Limits and Schedules sections in permit. |
| Nitrogen, Ammonia (NH3-N) Total | Daily Max - Variable | mg/L | Weekly | 24-Hr Comp | Report Ammonia effluent value on the DMR. Limits become effective on January 1, 2022. See Daily Maximum Ammonia Limits and Schedules sections in permit. |
| Nitrogen, Ammonia (NH3-N) Total | Weekly Avg | 43 mg/L | Weekly | 24-Hr Comp | Limit effective October. through March. Limits become effective on January 1, 2022. See Schedules section in permit. |
| Nitrogen, Ammonia (NH3-N) Total | Weekly Avg | 55 mg/L | Weekly | 24-Hr Comp | Limit effective April through May. Limits become effective on January 1, 2022. See Schedules section in permit. |

| | Monitoring Requirements and Limitations | | | | | | | |
|------------------------------------|---|--------------------|---------------------|----------------|---|--|--|--|
| Parameter | Limit Type | Limit and Units | Sample Frequency | Sample Type | Notes | | | |
| Nitrogen, Ammonia (NH3-N) Total | Weekly Avg | 35 mg/L | Weekly | 24-Hr Comp | Limit effective June through September. Limits become effective on January 1, 2022. See Schedules section in permit. | | | |
| Nitrogen, Ammonia (NH3-N) Total | Monthly Avg | 18 mg/L | Weekly | 24-Hr Comp | Limit effective October through March. Limits become effective on January 1, 2022. See Schedules section in permit. | | | |
| Nitrogen, Ammonia (NH3-N) Total | Monthly Avg | 23 mg/L | Weekly | 24-Hr Comp | Limit effective April through May. Limits become effective on January 1, 2022. See Schedules section in permit. | | | |
| Nitrogen, Ammonia (NH3-N) Total | Monthly Avg | 15 mg/L | Weekly | 24-Hr Comp | Limit effective June through September. Limits become effective on January 1, 2022. See Schedules section in permit. | | | |
| Chloride | Weekly Avg | 530 mg/L | 4/Month | 24-Hr Comp | This is an interim limit. Sampling shall be done on four consecutive days one week per month. See Chloride Variance and Schedules sections in permit for applicable target value. | | | |
| Chloride | | lbs/day | 4/Month | Calculated | Chloride mass = daily concentration (mg/L) x daily flow (MGD) x 8.34 | | | |
| Phosphorus, Total | | mg/L | Monthly | 24-Hr Comp | | | | |
| Phosphorus, Total | | lbs/day | Monthly | Calculated | Phosphorus mass = daily concentration (mg/L) x daily flow (MGD) x 8.34 | | | |
| Temperature Maximum | | deg F | 3/Week | Continuous | Monitor during calendar year 2024. | | | |

2.1.1 Changes from Previous Permit

Total BOD5: The weekly monitoring requirement for total BOD5 was removed.

Total Suspended Solids: An additional reporting requirement for the daily mass of total suspended solids discharged (calculated as lbs/day) was added.

pH: pH sampling was reduced from daily to 5 times per week.

Dissolved Oxygen: Dissolved Oxygen sampling was reduced from daily to 5 times per week.

Total Ammonia Nitrogen: The following limitations were added to the proposed permit with a weekly monitoring frequency: a pH-variable daily maximum limit; weekly average limits of 43 mg/L (October through March), 55 mg/L (April through May), and 35 mg/L (June through September); and monthly average limits of 18 mg/L (October through March), 23 mg/L (April through May), and 15 mg/L (June through September).

Chloride: The existing weekly average interim limit of 540 mg/L was reduced to an interim weekly average limit of 530 mg/L.

Copper: The weekly average concentration limit of 28 ug/L and mass limits of 0.09 lbs/day (dry weather) and 0.30 lbs/day (wet weather) for copper were removed.

Total Phosphorus: An additional reporting requirement for the daily mass of total phosphorus discharged (calculated as lbs/day) was added.

2.1.2 Explanation of Limits and Monitoring Requirements

Categorical Limits

• Total BOD₅, Total Suspended Solids, pH, and Dissolved Oxygen – Standard municipal wastewater requirements for BOD₅, total suspended solids, pH, and dissolved oxygen are included based on ch. NR 210, Wis. Adm. Code, 'Sewage Treatment Works' requirements for discharges to fish and aquatic life streams. Chapter NR 102, Wis. Adm. Code, 'Water Quality Standards for Surface Waters' also specified requirements for pH for fish and aquatic life streams. After evaluation of pH and dissolved oxygen effluent data showed stable results and no violations, pH and dissolved oxygen monitoring was reduced from daily to 5 times per week, at the permittee's request. The weekly monitoring requirement for Total BOD₅ was removed, as a weekly and monthly effluent limit for CBOD₅ is already included in the proposed permit, per s. NR 210.05 (1) (d), Wis. Adm. Code.

Water Quality Based Limits

• Total Ammonia Nitrogen - Current acute and chronic ammonia toxicity criteria for the protection of aquatic life are included in Table 2C and Table 4B of ch. NR 105, Wis. Adm. Code (effective March 1, 2004). Subchapter IV of ch. NR 106, Wis. Adm. Code, established procedures for calculating water quality-based effluent limitations for ammonia (effective March 1, 2004). The previous permit did not include limits because a determination was made in the January 14, 2014 Water Quality Based Effluent Limitations (WQBEL) memo that there was no reasonable potential of the discharge to exceed limits based on demonstrated ammonia nitrogen concentrations. In the September 4, 2019 WQBEL memo, a renewed evaluation using calculated limits, effluent data, and procedures in s. NR 106.05, Wis. Adm. Code, shows there is a reasonable potential for the existing facility to exceed calculated limits. The daily maximum limits for ammonia correspond to the daily pH value, in accordance with the following table:

| Effluent | NH ₃ -N | Effluent | NH ₃ -N | Effluent | NH ₃ -N |
|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| pН | Limit | pН | Limit | pН | Limit |
| s.u. | mg/L | s.u. | mg/L | s.u. | mg/L |
| $6.0 < pH \le 6.1$ | 74 | $7.0 < pH \le 7.1$ | 45 | $8.0 < pH \le 8.1$ | 9.5 |
| $6.1 < pH \le 6.2$ | 72 | $7.1 < pH \le 7.2$ | 40 | $8.1 < pH \le 8.2$ | 7.8 |

| $6.2 < pH \le 6.3$ | 71 | $7.2 < pH \le 7.3$ | 36 | $8.2 < pH \le 8.3$ | 6.4 |
|--------------------|----|---------------------------|----|--------------------|-----|
| $6.3 < pH \le 6.4$ | 69 | $7.3 < pH \le 7.4$ | 31 | $8.3 < pH \le 8.4$ | 5.3 |
| $6.4 < pH \le 6.5$ | 67 | $7.4 < pH \le 7.5$ | 27 | $8.4 < pH \le 8.5$ | 4.4 |
| $6.5 < pH \le 6.6$ | 64 | $7.5 < pH \le 7.6$ | 23 | $8.5 < pH \le 8.6$ | 3.6 |
| $6.6 < pH \le 6.7$ | 61 | $7.6 < pH \le 7.7$ | 20 | $8.6 < pH \le 8.7$ | 3.0 |
| $6.7 < pH \le 6.8$ | 57 | $7.7 < \text{pH} \le 7.8$ | 17 | $8.7 < pH \le 8.8$ | 2.5 |
| $6.8 < pH \le 6.9$ | 53 | $7.8 < pH \le 7.9$ | 14 | $8.8 < pH \le 8.9$ | 2.1 |
| $6.9 < pH \le 7.0$ | 49 | $7.9 < pH \le 8.0$ | 11 | $8.9 < pH \le 9.0$ | 1.8 |

Regulatory changes to s. NR 205.065, Wis. Adm. Code, became effective September 1, 2016 and require limits in this permit to be expressed as weekly average and monthly average limits whenever practicable. Therefore, weekly average limits of 43 mg/L (October through March), 55 mg/L (April through May), and 35 mg/L (June through September), and monthly average limits of 18 mg/L (October through March), 23 mg/L (April through May), and 15 mg/L (June through September) were added. This is the first permit term for the Village of Cedar Grove that includes effluent limitations for Total Ammonia Nitrogen. Effluent data collected by the facility in 2018 and 2019 exceeded the calculated weekly average limit on multiple occasions. Therefore, a 2-year schedule is included in the proposed permit for the facility to achieve compliance with the included ammonia limits.

• Chloride – Because upper ninety-ninth percentile of the 4-day concentration (the 4-day P⁹⁹) exceeds the calculated weekly average WQBEL, weekly average calculated limitations of 400 mg/L and 1,328 lbs/day (dry weather) and 3,133 lbs/day (wet weather) are needed in accordance with s. NR 106.05 (4) (9) (b), Wis. Adm. Code. However, the permittee has re-applied for a variance from the chronic chloride water quality criterion, which requires EPA approval. Therefore, an interim limit of 530 mg/L, expressed as a weekly average, is included. As a condition of this variance, implementation of chloride source reduction measures are required to achieve compliance with the weekly average target value of 480 mg/L by the end of the permit term. Calculated chloride daily mass (4 times per month) is included in the permit as an additional measure to evaluate the effectiveness of implemented source reduction measures.

Chloride Source Reduction Measures:

- 1. Continue to provide education to residents and businesses on the effects of excessive chloride use and the role of water softeners by providing information on the Village website, in the Village newsletter, and in Village brochures.
- 2. Explore adoption of a local regulation to require Demand Initiated Regeneration (DIR) water softeners for new installations and replacements and present to Village Board.
- 3. Explore adoption of a local regulation to require bypass of water softener systems for outside hose-bib use such as for landscape irrigation and present to Village Board.
- 4. Complete a chloride source investigation. Continue to collect samples from the system, including commercial customers, for high chloride discharges. Include both low-volume and high-volume water users.
- 5. Gather data regarding softener use in the Village by updating and administering the Cross Connection survey.
- 6. Contact the largest water users in the Village, including schools, hospitals, and apartment complexes. Provide information on softener regeneration optimization, brine reclamation systems, and responsible use of softened water connections.

- 7. Continue to take actions that prevent chloride from reaching the sewer system. Find and correct inflow and infiltration issues by investigating sources, repairing manholes, and following CMOM guidelines.
- 8. Educate DPW drivers on salt and brine use, efficient application, and cleanup procedures prior to snow season.
- Copper The current permit includes limits for total recoverable copper, as data analysis from the preceding permit term resulted in reasonable potential to exceed the WBQEL for total recoverable copper. In 2008, laboratory analytical errors due to quality control issues were discovered for multiple facilities in Sheboygan and Manitowoc counties. Therefore, copper effluent data collected prior to 2010 was found to be invalid and removed from consideration during evaluation of reasonable potential for the proposed permit. Analysis of data collected during the current permit term from 11/01/2014 to 04/30/2019 resulted in a 4-day P⁹⁹ of 9.0 ug/L, which is less than the WQBEL of 26 ug/L. Based on the updated reasonable potential analysis, and the inability of the wastewater treatment facility to treat or remove copper from the effluent, the previous limits were determined to be erroneous and are not included in the proposed permit.
- Total Phosphorus Revisions to administrative rules regulating phosphorus took effect on December 1, 2010. These rule revisions include additions to ch. NR 102 (s. NR 102.06), Wis. Adm. Code, which establish phosphorus standards for surface waters. Revisions to ch. NR 217 (s. NR 217, Subchapter III), Wis. Adm. Code, establish procedures for determining WQBELs for phosphorus, based on the applicable standards in ch, NR 102. Phosphorus criteria in s. NR 102.063, Wis. Adm. Code do not apply to limited aquatic life waters (s. NR 102.06 (6) (d). These waters were not included in the USGS/WDNR stream and river studies and, therefore, the Department lacked the technical basis to determine and propose applicable criteria. At some time in the future, the Department may adopt phosphorus criteria based on new studies focusing on limited aquatic life waters. Therefore, no limits are included in the proposed permit, but monthly monitoring (including a calculated daily mass) is included.
- Temperature Maximum New surface water quality standards for temperature took effect on October 1, 2010 and are detailed in Chapters NR 102 (Subchapter II- Water Quality Standards for Temperature) and NR 106 (Subchapter V- Effluent Limitations for Temperature) of the Wisconsin Administrative Code. The daily maximum effluent temperature limitation is 86° F for discharges to surface waters classified as Limited Aquatic Life according to s. NR 104.02 (3) (b) (1). Available discharge data showed no reasonable potential for exceeding the daily maximum effluent temperature limitation. Therefore, daily continuous monitoring is included for calendar year 2024 (fourth year of the proposed permit term) and the collected data will be used for the next permit reissuance.

2.1.3 Total Maximum Daily Load (TMDL) Limitations

TMDL Under Development: A Total Maximum Daily Load (TMDL) is being developed for the Northeast Lakeshore Basins to address phosphorus and total suspended solids water quality impairments within the TMDL area. This TMDL will likely result in limitations for phosphorus and total suspended solids that must be included in WPDES permits, which may be different than those calculated for this permit reissuance. TMDL-derived limits may be included in lieu of or in addition to the calculated limits upon permit reissuance or modification once the TMDL has been approved by U.S. EPA, according to s. NR 217.16, Wis. Adm. Code.

3 Land Application - Proposed Monitoring and Limitations

Municipal Sludge Description

| Sample Point | Sludge Class (A or B) | Sludge Type (Liquid or Cake) | Pathogen Reduction Method | Vector Attraction Method | Reuse Option | Amount Reused/Disposed (Dry Tons/Year) |
|-----------------|-----------------------------|---------------------------------------|---------------------------------|--------------------------------|---------------------|--|
| 005 | В | Liquid | Fecal Coliform | Injection | Land Application | 22 |

Does sludge management demonstrate compliance? Yes

Is additional sludge storage required? No

Is Radium-226 present in the water supply at a level greater than 2 pCi/liter? No

Is a priority pollutant scan required? No

Priority pollutant scans are required once every 10 years at facilities with design flows between 5 MGD and 40 MGD, and once every 5 years if design flow is greater than 40 MGD.

3.1 Sample Point Number: 005- LIQUID SLUDGE

| | Monitoring Requirements and Limitations | | | | | | |
|-------------------|---|--------------------|---------------------|----------------|-------|--|--|
| Parameter | Limit Type | Limit and Units | Sample Frequency | Sample Type | Notes | | |
| Solids, Total | | Percent | Annual | Composite | | | |
| Arsenic Dry Wt | Ceiling | 75 mg/kg | Annual | Composite | | | |
| Arsenic Dry Wt | High Quality | 41 mg/kg | Annual | Composite | | | |
| Cadmium Dry Wt | Ceiling | 85 mg/kg | Annual | Composite | | | |
| Cadmium Dry Wt | High Quality | 39 mg/kg | Annual | Composite | | | |
| Copper Dry Wt | Ceiling | 4,300 mg/kg | Annual | Composite | | | |
| Copper Dry Wt | High Quality | 1,500 mg/kg | Annual | Composite | | | |
| Lead Dry Wt | Ceiling | 840 mg/kg | Annual | Composite | | | |
| Lead Dry Wt | High Quality | 300 mg/kg | Annual | Composite | | | |
| Mercury Dry Wt | Ceiling | 57 mg/kg | Annual | Composite | | | |
| Mercury Dry Wt | High Quality | 17 mg/kg | Annual | Composite | | | |
| Molybdenum Dry Wt | Ceiling | 75 mg/kg | Annual | Composite | | | |
| Nickel Dry Wt | Ceiling | 420 mg/kg | Annual | Composite | | | |
| Nickel Dry Wt | High Quality | 420 mg/kg | Annual | Composite | | | |
| Selenium Dry Wt | Ceiling | 100 mg/kg | Annual | Composite | | | |
| Selenium Dry Wt | High Quality | 100 mg/kg | Annual | Composite | | | |
| Zinc Dry Wt | Ceiling | 7,500 mg/kg | Annual | Composite | | | |
| Zinc Dry Wt | High Quality | 2,800 mg/kg | Annual | Composite | | | |

| Monitoring Requirements and Limitations | | | | | | |
|---|--------------|--------------------|---------------------|----------------|-----------------------|--|
| Parameter | Limit Type | Limit and Units | Sample Frequency | Sample Type | Notes | |
| Nitrogen, Total Kjeldahl | | Percent | Annual | Composite | | |
| Nitrogen, Ammonium (NH4-N) Total | | Percent | Annual | Composite | | |
| Phosphorus, Total | | Percent | Annual | Composite | | |
| Phosphorus, Water Extractable | | % of Tot P | Annual | Composite | | |
| Potassium, Total Recoverable | | Percent | Annual | Composite | | |
| PCB Total Dry Wt | Ceiling | 50 mg/kg | Once | Composite | Monitor once in 2021. | |
| PCB Total Dry Wt | High Quality | 10 mg/kg | Once | Composite | Monitor once in 2021. | |

3.1.1 Changes from Previous Permit:

No changes from previous permit.

3.1.2 Explanation of Limits and Monitoring Requirements

Requirements for land application of municipal sludge are determined in accordance with ch. NR 204, Wis. Adm. Code. Ceiling and high-quality limits for metals in sludge are specified in s. NR 204.07 (5), Wis. Adm. Code. Requirements for pathogens are specified in s. NR 204.07 (6) and in s. NR 204.07 (7), Wis. Adm. Code, for vector attraction requirements. Limitations for PCBs are addressed in s. NR 204.07 (3) (k), Wis. Adm. Code.

Land application of waste shall be done in accordance with the permit conditions and applicable codes. All land application sites shall be approved prior to their use. To receive a list of approved sites, or to be notified of potential approvals, contact the WDNR compliance staff.

4 Schedules

4.1 Chloride Target Value

As a condition of the variance to the water quality based effluent limitation(s) for chloride granted in accordance with s. NR 106.83(2), Wis. Adm. Code, the permittee shall perform the following actions.

| Required Action | Due Date |
|--|------------|
| Annual Chloride Progress Report: Submit an annual chloride progress report. The annual chloride progress report shall: | 12/31/2020 |
| Indicate which chloride source reduction measures or activities in the approved Source Reduction Plan have been implemented; | |
| Include an analysis of trends in weekly, monthly and annual average chloride concentrations and total mass discharge of chloride based on chloride sampling and flow data; and | |
| Include an analysis of how influent and effluent chloride varies with time and with significant | |

| loadings of chloride such as loads from industries or road salt intrusion into the collection system. | |
|---|------------|
| Note that the interim limitation of 530 mg/L remains enforceable until new enforceable limits are established in the next permit issuance. The first annual chloride progress report is to be submitted by the Date Due. | |
| Annual Chloride Progress Report #2: Submit the chloride progress report as defined above. | 12/31/2021 |
| Annual Chloride Progress Report #3: Submit the chloride progress report as defined above. | 12/31/2022 |
| Annual Chloride Progress Report #4: Submit the chloride progress report as defined above. | 12/31/2023 |
| Final Chloride Report: Submit the final chloride report documenting the success in meeting the chloride target value of 480 mg/L, as well as the anticipated future reduction in chloride sources and chloride effluent concentrations. The report shall summarize chloride source reduction measures that have been implemented during the current permit term and state which, if any, source reduction measures from the approved Source Reduction Plan were not pursued and why. The report shall include an analysis of trends in weekly, monthly and annual average chloride concentrations and total mass discharge of chloride based on chloride sampling and flow data covering the current permit term. The report shall also include an analysis of how influent and effluent chloride varies with time and with significant loadings of chloride such as loads from industries or road salt intrusion into the collection system. Additionally, the report shall include proposed target values and source reduction measures for negotiations with the department if the permittee intends to seek a renewed chloride variance per s. | 9/30/2024 |
| NR 106.83, Wis. Adm. Code, for the reissued permit. | |
| Note that the target value is the benchmark for evaluating the effectiveness of the chloride source reduction measures but is not an enforceable limitation under the terms of this permit. | |
| Annual Chloride Reports After Permit Expiration: In the event that this permit is not reissued on time, the permittee shall continue to submit annual chloride reports each year covering source reduction measures implemented and chloride concentration and mass discharge trends. | |

4.1.1 Explanation of Schedule

This schedule is a condition of receiving a variance from the chronic water quality-based chloride limit of 400 mg/L, expressed as a weekly and monthly average, and a calculated weekly average mass limit of 1,328 lbs/day (dry weather) and 3,133 lbs/day (wet weather). The schedule requires that annual reports indicate which source reduction measures the Village of Cedar Grove has implemented during each calendar year to meet the target value of 480 mg/L as a weekly average and an analysis of chloride concentration and mass discharge data based on chloride sampling and flow data. The annual reports shall document progress made towards meeting the chloride target value by the end of the permit term.

4.2 Ammonia Effluent Limits

This compliance schedule requires the permittee to achieve compliance by the specified date.

| Required Action | Due Date |
|---|-----------------|
| Action Plan: The permittee shall prepare an Action Plan and submit it for Department approval. The plan shall include an evaluation of collected effluent data and possible improvements to optimize performance. The plan shall contain a schedule for implementation of measures and improvements. Once the plan is approved by the Department, the permittee shall take the steps called for in the plan and follow the schedule for implementation as approved. | 01/01/2021 |
| Progress Report: Submit a progress report summarizing actions taken to date. | 06/30/2021 |

Achieve Compliance: The permittee shall achieve compliance with ammonia effluent limitations.

4.2.1 Explanation of Schedule

This schedule requires the permittee to achieve compliance with ammonia limits by January 1, 2022. This is the first permit term for the Village of Cedar Grove that includes effluent limitations for Total Ammonia Nitrogen. Effluent data collected by the facility in 2018 and 2019 exceeded the calculated weekly average limit on multiple occasions. Therefore, a 2-year schedule is included in the proposed permit for the facility to achieve compliance with the included ammonia limits. The schedule requires that the permittee develop a plan for optimizing performance, make operational improvements, and submit a progress report before achieving compliance with the limits.

Attachments:

Substantial Compliance Determination dated April 19, 2019 and prepared by Curt Nickels.

Water Quality Based Effluent Limitations for Cedar Grove Wastewater Treatment Facility dated September 4, 2019 and prepared by Nicole Krueger.

Proposed Expiration Date:

March 31, 2025

Justification Of Any Waivers From Permit Application Requirements

No waivers were given from permit application requirements.

Prepared By: Lisa Creegan, Wastewater Specialist

Date: 9/18/2019

Revised Date Post Fact Check: 10/16/2019

Revised Date Post Public Notice: